

REMARKS

The examiner objects to the Abstract because it is more than 150 words. In response, applicants have amended the Abstract so that the length does not exceed 150 words. For this reason, withdrawal of the objection is respectfully requested.

The examiner also objects to the title of the application as being non-specific. The title has been amended to more clearly indicate the invention to which the claims are directed. Accordingly, applicants respectfully request withdrawal of this objection.

Claims 2 and 4 stand rejected under 35 U.S.C. § 102(e) as being anticipated by, or alternatively under 35 U.S.C. § 103(a) as being unpatentable over Yovichin et al (USPN 7,344,614). Applicants respectfully traverse these rejections in view of the perfection of the foreign priority date of December 25, 2003. A certified English translation of the Japanese patent application is provided herewith to perfect this priority date. Yovichin was filed on November 1, 2004, while the Japanese application was filed on December 25, 2003. Accordingly, Yovichin is not a prior art reference as required by 35 U.S.C. §§ 102(e) and 103(a). For this reason, withdrawal of these rejections is respectfully requested.

Claims 2 and 4 are also rejected under 35 U.S.C § 103(a) as being unpatentable over Japanese patent application 11-99564 (hereinafter, "Japan '564") in view of Suda et al. (USPN 6,613,177). Applicants traverse the rejection because the cited prior art references, taken alone or in combination, fail to disclose or suggest inner and outer belt layers formed from the same number of strip pieces, where strip pieces are butted against one another in an inner belt layer and are separated by spaces in an outer belt layer.

Japan '564 discloses a tire including two belt layers 7A and 7B, formed from an integer number of strip pieces S1, S2, S3... (see Abstract). However, while Japan '564 discloses that each belt layer is constructed from an integer number of strip pieces, the reference fails to disclose that the outer belt layer is made up of the same number of strip pieces as the inner belt layer. Moreover, Japan '564 fails to disclose or suggest that the strip pieces of the outer belt layer are separated from one another by a uniform gap.

Suda discloses a tire having a single belt layer made from a plurality of strips having a predetermined width. If a circumferential length of the belt layer cannot be obtained using an integer number of strips directly butted against one another, then a distance d is inserted between each of the strips to obtain a belt layer having the specified circumferential length (see col. 7, lines 8-33). Alternatively, Suda teaches that strips can be overlapped by a small amount to form a belt layer of the desired length, if the number of strips selected to form the belt layer would produce a too-long belt layer if the strips were simply butted against one another (see col. 7, lines 42-49). However, Suda fails to disclose a tire having two belt layers. Accordingly, it follows that Suda must also fail to disclose a tire having two belt layers made from the same number of strip pieces.

In contrast, a pneumatic tire according to an embodiment of the present invention includes an inner belt layer B_1 and an outer belt layer B_2 . The inner belt layer B_1 has a circumferential length L_1 . The innerbelt layer B_1 is formed from a plurality of strips where each strip has a width A and each strip is oriented at an angle θ with respect to the circumferential direction of the tire. The inner belt layer B_1 is made up of a number strips N_1

satisfying the equation $L_1 = N_1 \times A/\sin(\theta)$. Further, the number of strips N_2 used to form the outer belt layer B_2 is set equal to the number of strips N_1 used to form the inner belt layer B_1 (see present specification [0029]). The inner belt layer B_1 is formed by joining N_1 strip pieces together on a molding drum so that both sides of each strip piece are abutted against another strip piece. After the inner belt layer is formed, N_2 strip pieces that are used to form the outer belt layer are aligned on top of the inner belt layer B_1 . Because the strip pieces used to form the inner belt layer B_1 have a thickness G , the circumference of the outer belt layer is slightly larger than that of the inner belt layer. Since the inner and outer belt layers use the same number of strip pieces, the strip pieces of the outer belt layer are separated by a width of $2\pi G/N_2$ so that the strips are evenly spaced. Since the cited references, taken alone or in combination, fail to disclose or suggest these features, applicants respectfully request withdrawal of the rejection of claims 2 and 4.

Finally, new claims 9 and 10 are added to further define the claimed invention. New claims 9 and 10 depend from independent claims 2 and 4, respectively, and are allowable for at least the reasons discussed above with respect to associated independent claims 2 and 4. Further, new claims 9 and 10 clarify that the sides of each of the strip pieces are substantially planar, and extend for substantially the entire thickness of the strip piece. Support for these features can be found, for example, in Figs. 7 and 8 of the present application. In contrast, Suda teaches that each strip piece includes a margin rubber 1b, as shown in Figs. 7-9 of Suda. The margin rubber extends beyond the side of the strip piece, and is arranged to be at least partially covered by an adjacent strip piece, as shown in

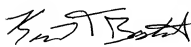
Figs. 7-9. One of ordinary skill in the art would not have modified the teachings of Japan '564 in light of Suda, without including these margin rubber pieces. Accordingly, for this additional reason, applicants assert that claims 9 and 10 are in condition for allowance, which is respectfully requested.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

The Commissioner is hereby authorized to charge fees which may be required to this application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069.

Respectfully submitted,

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